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NOTICE OF ALLOWANCE AND FEE(S) DUE

01/02/2008

King & Spalding, LLP 191 Peachtree Street, N.E. 45th Floor Atlanta, GA 30303

EXA	MINER
CRANE, L	AWRENCE E
ART UNIT	PAPER NUMBER
1623	
DATE MAILED: 01/02/20	108

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,585	09/26/2003	Gilles Gosselin	18085.105102	8655

TITLE OF INVENTION: 2' OR 3' -DEOXY AND 2', 3' -DIDEOXY-BETA-L-PENTOFURANONUCLEO-SIDE COMPOUNDS, METHOD OF

PREPARATION AND APPLICATION IN THERAPY, ESPECIALLY AS ANTI-VIRAL AGENTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	04/02/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

1. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.
- II. PART B FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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appropriate. All further c	correspondence including d below or directed oth	ig the Patent, advance o	rders and notification of n	naintenance fees w	rill be mailed to the cur	rrent correspondence address as separate "FEE ADDRESS" for
CURRENT CORRESPONDE	NCE ADDRESS (Note: Use BI	ock I for any change of address)	Fee((s) Transmittal. Thi ers. Each additional	s certificate cannot be us I paper, such as an assig	ed for domestic mailings of the sed for any other accompanying mment or formal drawing, must
King & Spaldin 191 Peachtree Str 45th Floor Atlanta, GA 3030	reet, N.E.	/2008 ·		Cer	of mailing or transmissi tificate of Mailing or Tr is Fee(s) Transmittal is b rith sufficient postage fo Stop ISSUE FEE add TO (571) 273-2885, on t	
Atlania, OA 3030	,,					(Depositor's name)
						(Signature)
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET N	O. CONFIRMATION NO.
10/672,585	09/26/2003	•	Gilles Gosselin		18085.105102	8655
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S)	DUE DATE DUE
nonprovisional	МО	\$1440	\$300	\$0	\$1740	04/02/2008
EXAMI	NER	ART UNIT	CLASS-SUBCLASS			
CRANE, LAV	VRENCE E	1623	536-027110	•		
PTO/SB/47; Rev 03-02 Number is required. B. ASSIGNEE NAME AN	ndence address (or Char /122) attached. cation (or "Fee Address' ? or more recent) attach ND RESIDENCE DATA sss an assignee is identi in 37 CFR 3.11. Comp	nge of Correspondence Indication form ed. Use of a Customer	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attoo listed, no name will be THE PATENT (print or type data will appear on the part a substitute for filing and (B) RESIDENCE: (CITY)	3 registered patentiely, e firm (having as a gent) and the namemeys or agents. If a printed. be) atent. If an assigned assignment.	member a 2 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	he document has been filed for
Please check the appropria	nte assignee category or	categories (will not be pr	rinted on the patent):	Individual Co	rporation or other private	e group entity Government
a. The following fee(s) an Issue:Fee Publication Fee (No Advance Order - #	small entity discount p	permitted)	b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038 authorized to charge	is attached. ge the required fee(s), an	fee shown above) by deficiency, or credit any one an extra copy of this form).
Change in Entity Statu a. Applicant claims NOTE: The Issue Fee and	SMALL ENTITY statu Publication Fee (if requ	is. See 37 CFR 1.27.	b. Applicant is no long			37 CFR 1.27(g)(2). or the assignee or other party in
nterest as shown by the re	cords of the United Sta	tes Patent and Trademark	Office.			
Authorized Signature _				Date		
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This collection of informa in application. Confidenti ubmitting the completed his form and/or suggestion	tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to th	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office	etain a benefit by the imated to take 12 nd idual case. Any cour, U.S. Patent and	ne public which is to file ninutes to complete, incl mments on the amount of Trademark Office, U.S.	(and by the USPTO to process) uding gathering, preparing, and of time you require to complete Department of Commerce, P.O.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,585	09/26/2003	Gilles Gosselin	18085.105102 865	
7.	590 01/02/2008		EXAM	INER
King & Spalding	. LLP		CRANE, LA	WRENCE E
191 Peachtree Stre		·	ART UNIT	PAPER NUMBER
45th Floor			1623	
Atlanta, GA 30303	•		DATE MAILED: 01/02/200	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<u> </u>	Application No.	Applicant(s)
	10/070 505	GOSSELIN ET AL.
Notice of Allowability	10/672,585 Examiner	Art Unit
•		1000
	L. E. Crane	1623
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	olication. If not included will be mailed in due course. THIS
1. This communication is responsive to the amendment filed	October 9, 2007.	
2. The allowed claim(s) is/are <u>1-4,6-9,17 and 18</u> .		
3. ☐ Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the:		
 Certified copies of the priority documents have Certified copies of the priority documents have 		
Copies of the certified copies of the priority documents have		
International Bureau (PCT Rule 17.2(a)).		nadonal stage application from the
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply IENT of this application.	complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review (PTO-	948) attached
1) hereto or 2) to Paper No./Mail Date	•	
(b) including changes required by the attached Examiner's Paper No./Mail Date 04092007.	s Amendment / Comment or in the C	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal P	atent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. X Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7. ⊠ Examiner's Amendr	
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stateme	ent of Reasons for Allowance
of Biological Material	9. Other	AS P.
		L. E. Crane, Ph.D. Esq. Primary Patent Examiner Technology Center 1600

10/672,585 Art Unit: 1623

An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. §1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

In claim 1 at line 11, immediately following the term "base B' "the following was inserted: -- with an appropriate coupling reagent -- .

In claim 1 at line 14, the term "in which formulae (II) and (III)" was deleted in favor of the term -- wherein --.

In claim 1 at line 17, the term "or a silyl group" was amended to read -- and a silyl group --.

In claim 1 at line 19, the term "I or a C_1 " was amended to read -- I, a C_1 --.

In claim 1 at line 19, the term "acyloxy or alkoxy" was amended to read -- acyloxy and C_1 to C_5 alkoxy --.

In claim 1 at line 21, the term "optionally" was deleted.

In claim 1 at lines 21-22, the term "a protecting group" was amended to read -- an amino protecting group -- .

In claim 1 at line 22, the term "a benzyl or a silyl" was amended to read -- a benzyl and a silyl --.

In claim 1 at lines 22-23, immediately following the term "silyl group" the following was inserted: -- when necessary --.

In claim 3 at line 3, the term "isopropylid-ene" included with a chemical name was replaced with the following: -- isopropylidenyl -- .

Claim 5 was cancelled without prejudice.

Art Unit: 1623

The following new claim was added:

-- 18. The coupling reagent present in the condensing step of claim 1 is selected from the group consisting of tin (IV) chloride, a mixture of hexamethyldisilazane and chlorotrimethylsilane, a mixture of N, O-bis(trimethylsilyl)acetamide and trimethylsilyl triflate, and a mixture of hexamethyldisilazane and trimethylsilyl triflate. -- .

Authorization for this Examiner's Amendment was given in a telephone interview with Suzanne Hollinger on December 20, 2007.

The following is an Examiner's Statement of Reasons for Allowance:

Examiner notes applicant's amendments and finds that some of the issues noted in the previous Office action have been effectively addressed. The remaining issues of definiteness, grammar, terms of art, and technical terminology have been addressed by the above amendments, including the identification of the "coupling reagents" required to execute the condensing step as disclosed for different reactants in the prior art newly supplied by applicant. Therefore, the instant claims as presently amended have been found to be allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Papers related to this application may be submitted to Group 1600 via facsimile transmission (FAX). The transmission of such papers must conform with the notice published in the Official Gazette (1096 OG 30, November 15, 1989). The telephone number to FAX (unofficially) directly to Examiner's computer is 571-273-0651. The telephone number for sending an Official FAX to the PTO is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner L. E. Crane whose telephone number is 571-272-0651. The examiner can normally be reached between 9:30 AM and 5:00 PM, Monday through Friday.

10/672,585 Art Unit: 1623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. S. Anna Jiang, can be reached at 571-272-0627.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is 571-272-1600.

All Post-Allowance Correspondence concerning this application must be mailed to:

BOX ISSUE FEE COMMISSIONER FOR PATENTS WASHINGTON, DC 20231

OR you can FAX them to the Office of Patent Publications at 703-308-5083, in order to expedite the handling of such correspondence as amendments under 37 C.F.R. §1.312; Information Disclosure Statements (IDS's), and formal drawings. Sending Post-Allowance papers to Technology Center 1600 will only cause <u>delays</u> in matching papers with the case.

For information concerning status of correspondence sent after receipt of the Notice of Allowance, please contact the Correspondence Branch at <u>703-305-8027</u>. The Notice of Allowance also has an insert containing contact information of other items, including Issue Fees, receipt of formal drawings, and the status of the application.

LECrane:lec 12/20/2007

L. E. Crane, Ph.D. Esq.

Primary Patent Examiner

Technology Center 1600

	Application No.	Applicant(s)
Examiner-Initiated Interview Summai	10/672,585	GOSSELIN ET AL.
Lammer-muated interview duminar	Examiner	Art Unit
	L. E. Crane	1623
All Participants:	Status of Application	on: Response to FAOM received
(1) <u>L. E. Crane</u> .	(3)	
(2) <u>Suzanne Hollinger</u> .	(4)	
Date of Interview: 20 December 2007	Time:	
Type of Interview: ☑ Telephonic ☐ Video Conference ☐ Personal (Copy given to: ☐ Applicant ☐		
Exhibit Shown or Demonstrated: Yes No No If Yes, provide a brief description:	0	
Part I.		
Rejection(s) discussed:		
possible indefiniteness rejections and objection to minor	errors.	
Claims discussed:		
1, 3 and 5		
Prior art documents discussed: None		
Part II.		
SUBSTANCE OF INTERVIEW DESCRIBING THE		
Applicant was advised by FAX of corrections necessary amendment was agreed to and authorized, and applican	to make the claims allowable. Fo t was informed that the case was	llowing one correction an examiner's allowable as amended.
Part III.		
 It is not necessary for applicant to provide a seguine directly resulted in the allowance of the application of the interview in the Notice of Allowability. It is not necessary for applicant to provide a seguine did not result in resolution of all issues. A brief seguine in the seguine is not necessary for applicant to provide a seguine in the seguine in the seguine is not necessary for applicant to provide a seguine in the seguine is not necessary for applicant to provide a seguine in the seguine is not necessary for applicant to provide a seguine in the seguine is not necessary for applicant to provide a seguine in the seguine is not necessary for applicant to provide a seguine in the seguine is not necessary for applicant to provide a seguine is necessary for applicant to provide a seguine is not necessary fo	ion. The examiner will provide parate record of the substance	a written summary of the substance of the interview, since the interview
MK Gave		
(Exeminer/SPE Signature) (Ap	pplicant/Applicant's Represent	ative Signature – if appropriate)

Notice of References Cited

Application/Control No.

10/672,585

Applicant(s)/Patent Under Reexamination

GOSSELIN ET AL.

Examiner

L. E. Crane

Art Unit

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	Α	US-5,561,120 A	10-1996	Lin et al.	514/49
*	В	US-5,627,160 A	05-1997	Lin et al.	514/49
*	С	US-5,631,239 A	05-1997	Lin et al.	514/49
*	D	US-5,830,881 A	11-1998	Lin et al.	514/45
*	E	US-5,559,101 A	09-1996	Weis et al.	514/45
*	F	US-6,025,335 A	02-2000	Weis et al.	514/44
	G	US-			
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	J	US-			
	К	US-			
	L	US-			
	М	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name ·	Classification
	N					
	0					
	Р					
	Q					
	R					
	S					
	Т					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
*	U	(R) Périgaud et al., "Potential Antiviral Agents. Sterospecific Synthesis of Purines and Pyrimidines Substituted with Chiral Acyclic Chains by Sugar-Ring Opening of [alpha]-L-Arabinopyranosyl Nucleosides," J. Chem. Soc., Perkin Transactions 1, 1992(15), 1943-1952 (August 7, 1992); copy supplied by applicant.
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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